



## **Bone Grafting Materials**

### **Increasing Bone with Bone Grafting Materials**

**This explanation sheet describes the material characteristics of these treatments. It should be read together with other information you receive from your dentist for your planned treatment. It will assist you in giving your informed consent to the treatment.**

#### **Why is an Explanation Necessary?**

There are numerous materials that are currently available for increasing bone. Your dentist must inform you about the alternative treatment methods and the materials that are available.

#### **Bone Replacement Material**

##### **1. What are the reasons for using Biomaterials?**

In your particular case, you do not have enough of your own bone available for the dentist to be able to stabilise a tooth or to securely anchor a dental implant. Grafting material will be used to increase your own bone, thus providing the dentist with an adequate amount for the procedure you require.

##### **2. What is a Bone Grafting Material?**

Bone material materials are used to increase the body's own bone. It is composed of the hard mineral portion of bone. It is therefore well accepted by human bone tissue and serves as a scaffold for the new bone growth.

##### **3. What is the function of Bone Grafting Materials?**

It is a solid scaffold which serves as a scaffold to allow new bone to grow. This scaffolding material enables and facilitates bone formation in the area where the procedure is performed. It is inserted into the treatment area in the form of grains or small blocks. Your own bone slowly grows into the material, which is gradually broken down by the body and replaced by newly formed bone.

##### **4. Are there alternatives?**

As an alternative, one can use the body's own bone, which is taken from a different location, for example the chin or hip. However this procedure requires additional anaesthesia. Once the bone sample is removed from its original site it is then inserted into the required area. In this procedure, the following must be considered:

- There is now a second area of operation, which might be associated with additional discomfort or loss of sensitivity.
- It is possible that the amount of the newly gathered bone will not be adequate for the intended purposes.

## **Collagen Membrane**

### **1. What is Collagen Membrane?**

It is a membrane made of collagen that is generally used to cover the bone replacement material.

### **2. What is the function of a Collagen Membrane?**

It has been proven that better healing rates are achieved when the bone grafting particles are covered with a membrane. Because the tissues of the gum grow more rapidly than the new bone, the membrane protects the bone particles from this faster growing connective tissue. This ensures that the underlying bone can heal in an undisturbed fashion.

### **3. What is Collagen Membrane made from?**

It is composed of highly purified natural collagen obtained from human donor tissue, pigs, cows or horses. Synthetic membranes are also available.

### **4. Does the membrane have to be removed in a second procedure?**

No. The collagen membrane becomes completely broken down by the body, hence a further operation to remove it is unnecessary. Some synthetic membranes require removal.

### **Are there any Independent Quality Controls?**

The manufacturing processes of bone grafting materials and membranes are subject to a Quality Assurance System based on international guidelines (ISO 9001 / EN 46001). These processes are checked once every year by acknowledged, independent testing institutes and international authorities.

### **Do Side-Effects Occur?**

As with almost all natural and artificial materials incompatibility and allergic reactions are possible and can never be fully excluded. However because of the high degree of product purity such reactions have been limited to a few mild individual cases. If you experience any reactions tell your dentist or doctor.

**Bone materials and membranes have been explained to me in terms I can understand, and I agree to treatment.**

Name:

Date of Birth:

Address:

Patient Signature:

Date:

Dentist's Signature:

Date: